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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,189

09/27/2004

Masahiro Arioka

Q83676

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23373 7590 02/27/2007
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EXAMINER

VORTMAN, ANATOLY

ART UNIT

PAPER NUMBER

2835

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/509,189

Applicant(s)

ARIOKA, MASAHIRO

Examiner

Anatoly Vortman

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/12/07</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Reply Under 37 CFR 1.111

1. The submission of the reply filed on 01/12/07 to the non-final Office action of 09/12/06 is hereby acknowledged. Claims 1-14 have been amended and new claim 15 has been added. Thus, claims 1-15 are active in the instant application. The Office action follows:

Information Disclosure Statement

2. Information Disclosure Statement filed on 01/12/07 lacks copy of the non patent literature reference: "Japanese Utility Model Application No. 178111/1985 (Laid-open No. 88408/1987 (Meidensha Corp.)", only the translated abstract is on file. Therefore, this reference had not been considered.

Specification

3. The amendment filed on 01/12/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is as follows: "the disconnecter and a movable rod of said vacuum switch tube are electronically connected to each other". Contrary to the Applicant's

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position these features have not been taught by the original disclosure. Neither the original specification nor the original drawings show that said disconnecter and said movable rod of the vacuum switch tube are electronically connected to each other.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

4. Claims 7 and 15 are objected, because they contain open-ended clauses, thus rendering the scope of the claims indefinite. Claims recite: "grounding switch can be mounted" (line 12 of claim 7 and lines 3-4 of claim 15), which does not define a structure, but merely a possibility that something can be mounted. Language that suggests or makes optional but does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. (MPEP 2106[R-3] II (C) and MPEP 2111.04 [R-3]). Applicant is hereby required to carefully review all pending claims in order to correct the aforementioned and similar not mentioned above deficiencies.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-15, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. All independent claims as amended, recite the limitations: "said disconnecter and a movable rod of said vacuum switch tube are electronically connected to each other". This is a new matter, which was not taught by the original disclosure. There was no teaching in the original disclosure that said disconnecter and said movable rod of the vacuum switch tube are electronically connected to each other. Further, amended claim 1 recites: "said disconnecter is supported solely by said insulating frame". This contradicts with the original disclosure. For example, on Fig. 1 of the instant application is shown that the disconnecter (10b) is supported not only by the insulating frame (17), but also by the rigid bus-work (26, 27) and its supporting insulators and by the mechanical linkages (not numbered) connecting the disconnecter to the vacuum tube rod.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by EP/0,924,827 to Quenin et al. (Quenin).

Regarding claims 1 and 2, as best understood, Quenin disclosed (Fig. 7) a gas-insulated switchgear in which main circuit equipments are accommodated within a tank (54) hermetically

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filled with an electrically insulating gas, comprising; at least one switchgear module in which a disconnecter (18) with a grounding switch (24) and an electrically insulating frame ((56, 58) and not-numbered member for selectively supporting a vacuum switch tube (14)) for selectively supporting an interrupter (27, 14) including a vacuum switch tube (14) are disposed in the tank (54) in a vertically stacked relationship, and in which said disconnecter (18) and said vacuum switch tube (14) are connected between their movable rods (26, 30) (see also translated abstract, lines 7-10).

Regarding claims 3 and 4, as best understood, Quenin disclosed (Fig. 7) a plurality of the switchgear modules, each having a tank (the upper module accommodating the disconnecter, switches and the vacuum valve, and the bottom module accommodating components (20, 50, 48)), the adjacent tanks are connected to each other via a spacer (56, 58) hermetically connecting said tanks to define a circuit.

9. Alternatively, claims 1-4, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by JP/2000-228,806 to Hiramoto et al. (of record).

Regarding claims 1 and 2, as best understood, Hiramoto disclosed (Fig. 6) a gas-insulated switchgear in which main circuit equipments are accommodated within a tank hermetically filled with an electrically insulating gas, comprising; at least one switchgear module in which a disconnecter (4a) with a grounding switch (18a,b) and an electrically insulating frame (7a,7b) for selectively supporting a vacuum switch tube (5c)) for selectively supporting an interrupter (5c,17b) including a vacuum switch tube (5c) are disposed in the tank in a vertically stacked relationship, and in which said disconnecter (4a) and said vacuum switch tube (5c) are

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connected between their movable rods (26, 30) (inherently, since said rods are linked together, so as to prevent said disconnecter from opening, while said vacuum switch tube is closed).

Regarding claims 3 and 4, as best understood, Hiramoto disclosed (Fig. 6) a plurality of the switchgear modules, each having a tank (i.e. three (3) vertically stacked modules), the adjacent tanks are connected to each other via a spacer (1t) hermetically connecting said tanks to define a circuit.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9 and 10, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Quenin in view of US/6,515,247 to Tsuzura et al., (Tsuzura).

Regarding claims 9 and 10, as best understood, Quenin disclosed all, but the lightning arrester.

Tsuzura disclosed a gas insulated switchgear (Fig. 1) having a lightning arrester (32) to provide protection from the lightning-induced overvoltages.

It would have been obvious to a person of ordinary skill in the switchgear art at the time of the invention to provide switchgear of Quenin with a lightning arrester as taught by Tsuzura in order to provide protection from the lightning-induced overvoltages.

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12. Alternatively, claims 9 and 10, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiramoto in view of US/6,515,247 to Tsuzura et al., (Tsuzura).

Regarding claims 9 and 10, as best understood, Hiramoto disclosed all, but the lightning arrester.

Tsuzura disclosed a gas insulated switchgear (Fig. 1) having a lightning arrester (32) to provide protection from the lightning-induced overvoltages.

It would have been obvious to a person of ordinary skill in the switchgear art at the time of the invention to provide switchgear of Hiramoto with a lightning arrester as taught by Tsuzura in order to provide protection from the lightning-induced overvoltages.

Response to Arguments

13. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AV



Anatoly Vortman, P.E.
Primary Examiner
Art Unit 2835